Behavioral-Based Safety

Behavior-based approaches address a person's behaviors directly by changing relationships between behaviors and their consequences [e.g., "acting people into thinking differently" (E. Scott Geller)]. This approach defines the problem in terms of relevant observable behaviors, and then designs and implements intervention programs to decrease behaviors causing the problem and/or increase behaviors that can alleviate the problem.

It is a process not a program. It is ongoing, builds credibility, requires work, and produces long-term results from improving the systems that sustain behavior.

Background

Focusing on behavior does not imply faultfinding with individuals. Behavior is not a simple matter of personal choices. Placing blame for At-risk behaviors would be embarrassing and counterproductive. Fixing the problem, not fixing the blame, is the principle that truly prevents accidents. Measuring behavior identifies barriers to safe behavior.

Negative consequences for unsafe behavior are quite rare. In fact, individuals can work unsafely for years and never receive an injury. As a result, they internalize the rule as "this unsafe behavior gives me convenience, comfort, or a faster job and never gives me a negative consequence. We do many things throughout the day that put ourselves at risk. Many times this takes place because people do not perceive any risk in doing so.

Self Observations

The purpose of the checklist is to measure, on a continuous basis, behaviors that ultimately prevent, cause or contribute to injury based on our injury/illness experience. The process is anonymous and no disciplinary actions are associated with the information. Data are entered into a database and the original sheet is destroyed. The focus is on effort and level of activity instead of the downstream results.

The checklist identifies behaviors that employees have control over. Some at-risk behaviors employees note on their checklists may turn out to be ones they do not have control over, in which case process or equipment modifications might be in order to remove this barrier and allow for the work to be done safely.

Critical Behaviors in HCD identified for this phase of the process:

- Body use
- Following procedures
- Attention to environment

The injury potential from the identified behaviors does not mean that ***maybe*** someone will be hurt. It means that given enough time someone ***will*** be hurt and our injury/illness experience shows that.

Every time an opportunity for a particular target behavior occurs, simply judge whether the behavior was safe or at-risk and mark that column of your checklist. At the end of a day or week, total up the number of safe or at-risk occurrences and turn the sheet in for tallying. The mere recording and charting of percent safe scores will lead to significant improvement because the process itself reflects personal accountability.

We need to understand the "Whys" of our behavior in order to modify the consequences. The checklist has a place for us to specify what was occurring at the time an at-risk behavior was performed and why that may have occurred (e.g., time, convenience, inattention).

UCRL-MI-149999

Barriers

Examples of barriers to safe behavior are:

- Complacency is a barrier to safety. A decrease in injuries may lead to complacency.
- Deadlines: The message conveyed is usually "I need this done by…" not "I need this to be done safely by…"
- Time is often the culprit for most unsafe behavior.
- Hazard recognition and response
- Rewards and recognition
- Personal factors (physical limitations, stress, fatigue, illness)
- Culture
- Personal choice
- Inadequate skills, knowledge or ability
- Lack of accountability for following safe procedures

If we can remove antecedents and improve the consequences, we can break down the barriers to safety and improve the overall safety culture and injury rates.

Safety Self Management

People in Hazards Control are very conscientious about safety and, for the most part, work alone. When you are by yourself, do you choose safe behaviors and hold yourself accountable? The use of this safety self-management process can help you choose the safe way more often. But you need to choose these safe behaviors, and this takes commitment and accountability.

The self-management process reviewed here can not only help us to work more safely, it can also help us do things that can build trust and promote personal accountability for safety. When you do all of this you are going beyond the call of duty. You feel responsible and hold yourself personally accountable for those aspects of industrial health and safety within your domain of personal control.

This work was performed under the auspices of the U.S. Department of Energy by the University of California, Lawrence Livermore National Laboratory under contract No. W-7405-Eng-48.

Hazards Control Department
Injury/Illness Prevention Plan, Phase II